

### REMARKS

Claims 1-29 are pending. Claims 4, 7, 12-17, 21 and 26 have been cancelled. Claims 1, 10, 18, 19, 22-25, and 27-29 have been amended. Claims 30-33 have been added. No new matter has been introduced. Support for the amendment can be found at least in page 5.

### **Objections**

Claims 1, 10, 22, 27 and 29 are objected to because of minor informalities. The informalities have been corrected.

### **Rejections under section 103**

Claims 1-3, 5, 6, 8-11, 18-20, 22-25, and 27-29 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 5,812,582 to Gilliland et al ("Gilliland") in view of U.S. Patent No. 5,757,829 to Jiang et al. ("Jiang"). The applicant respectfully traverses.

Claim 1, as amended, recites an apparatus for coupling optical power into a fiber. The apparatus includes a first VCSEL having a first optical power output and a second VCSEL coupled in parallel therewith, the second VCSEL having a second optical power output that is proportional to but different from the first optical power output of the first VCSEL.

Gilliland discloses a single VCSEL in a can package. As admitted by the Examiner, Gilliland does not disclose a first VCSEL and a second VCSEL coupled in parallel therewith, as recited in the claim. Gilliland also fails to disclose or suggest that a second VCSEL has a second optical power output that is proportional to but different from a first optical power output of a first VCSEL. The Examiner points to Jiang for the missing subject matter.

Although Jiang discloses a first VCSEL generating a first emission and a second VCSEL that is coupled in parallel with the first VCSEL and generates a second emission, Jiang does not disclose or suggest that the second VCSEL has a second optical power output that is proportional to but different from a first optical power output of the first VCSEL, as recited in the claim. On the contrary, Jiang teaches that the second emission is generally identical to the first emission (Col. 1, lines 55-63). Because neither Gilliland nor Jiang discloses the above limitation, no

*prima facie* obviousness has been established, and claim 1 should be allowed over the cited combination. Claims 2, 3, 5, 6, and 8-11 are dependent claims depending from claim 1, and should be allowed for at least the same reasons.

Claim 18, as amended, recites a VCSEL component for driving a fiber optic. The VCSEL component includes a first VCSEL having a first optical power output and a second VCSEL having a second optical power output that is proportional to but different from the first optical power output. As discussed above with reference to claim 1, neither Gilliland nor Jiang discloses or suggests the above limitation. Therefore, no *prima facie* obviousness has been established, and claim 18 should be allowed over the cited combination. Claims 19 and 20 are dependent claims depending from claim 18, and should be allowed for at least the same reasons.

Claim 22, as amended, recites a method for fabricating a device capable of coupling optical power into a fiber. The method includes forming a VCSEL array by coupling in parallel a first VCSEL having a first optical power output and a second VCSEL having a second optical power output that is proportional to but different from the first optical power output. As discussed above with reference to claim 1, neither Gilliland nor Jiang discloses or suggests the above limitation. Therefore, no *prima facie* obviousness has been established, and claim 22 should be allowed over the cited combination. Claims 23-25 are dependent claims depending from claim 22, and should be allowed for at least the same reasons.

Claim 27, as amended, recites a method for coupling optical power into a fiber. The method includes coupling in parallel a first VCSEL having a first optical power output and a second VCSEL having a second optical power output that is proportional to but different from the first optical power output. As discussed above with reference to claim 1, neither Gilliland nor Jiang discloses or suggests the above limitation. Therefore, no *prima facie* obviousness has been established, and claim 27 should be allowed over the cited combination. Claim 28 is a dependent claim depending from claim 27, and should be allowed for at least the same reasons.

Claim 29, as amended, recites a method for coupling optical power into a fiber. The method includes monitoring a first optical power output of a first VCSEL by separately monitoring a second optical power output of a second VCSEL, the second optical power output being proportional to but different from the first optical power output. As discussed above with reference to claim 1, neither Gilliland nor Jiang discloses or suggests the above limitation.

Applicant : Stefan J. Burmeister  
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Therefore, no *prima facie* obviousness has been established, and claim 29 should be allowed over the cited combination.

**New claims**

Claims 30-33 are dependent claims and should be allowed for at least the same reasons as their corresponding base claims.